

The purpose of this installation guide is to provide instructions on removing and installing the fan of the Sony VAIO VPC-EB33FM laptop.

A detailed photograph of a laptop's internal components, showing the motherboard, CPU, GPU, RAM, and various connectors. The motherboard is blue and populated with numerous integrated circuits, capacitors, and other electronic components. A large black cooling fan is visible on the right side, connected to a copper heat pipe that runs across the top of the motherboard. The CPU is mounted in the center, with a black heat spreader. To the right of the CPU is the GPU. Two RAM modules are visible, secured with metal brackets. Various connectors for the keyboard, touchpad, and other peripherals are located along the edges of the motherboard. A small green battery is visible near the bottom left corner. The overall layout is compact and organized, typical of a laptop's internal design.

INTRODUCTION

This guide will inform readers on how to safely remove the fan of the Sony VAIO VPC-EB33FM laptop for replacement.



TOOLS:

- [Tweezers](#) (1)
- [Phillips #1 Screwdriver](#) (1)
- [Phillips #00 Screwdriver](#) (1)



PARTS:

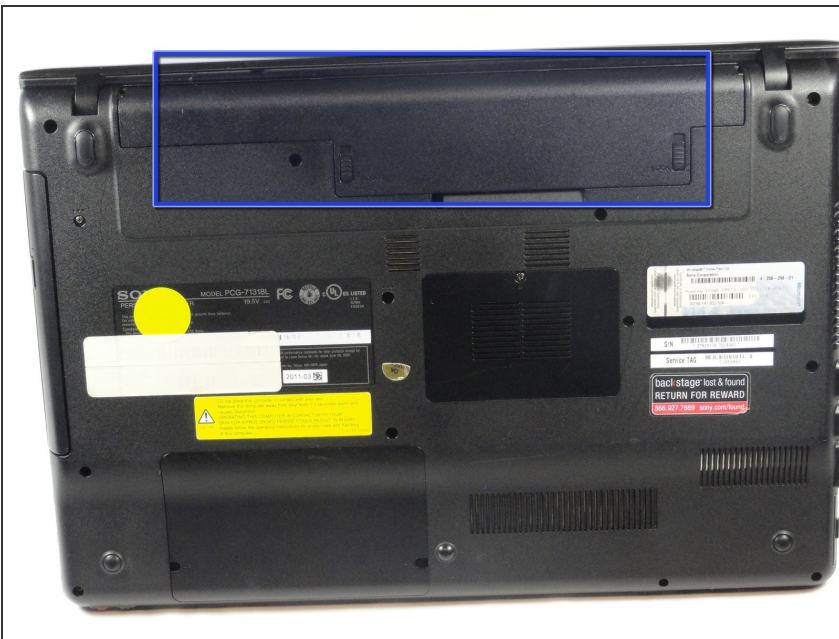
- [Sony Fan](#) (1)
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Step 1 — Battery



- If the laptop isn't turned off, then do so by holding down the power button.
- Turn the laptop onto its backside.

Step 2



- Locate the battery below the screen attachment.
- ⓘ The battery is shaped as a long rectangle with rounded edges.

Step 3



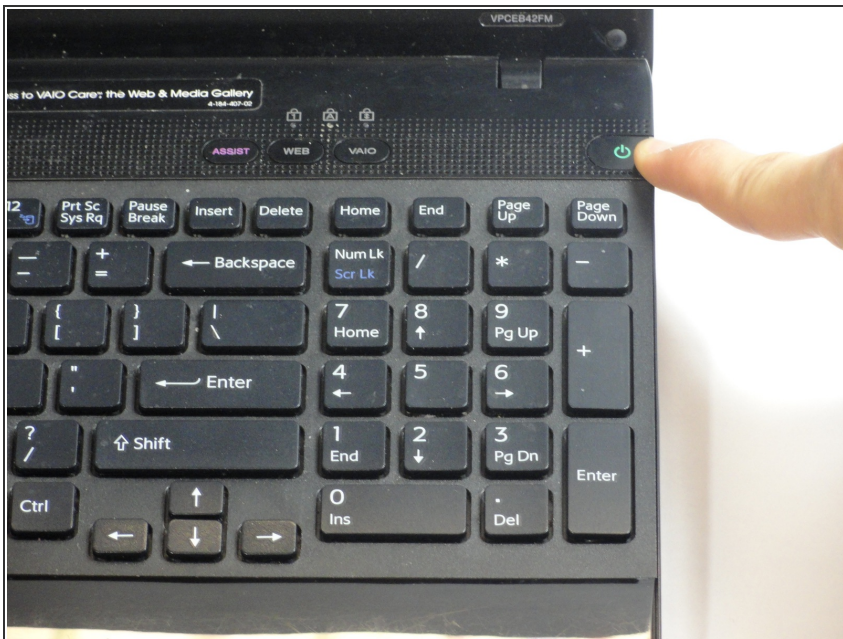
- Press into the release button while holding the unlock button in position.

Step 4



- Lift the battery out at the notch while holding the release button.

Step 5 — Hard Drive



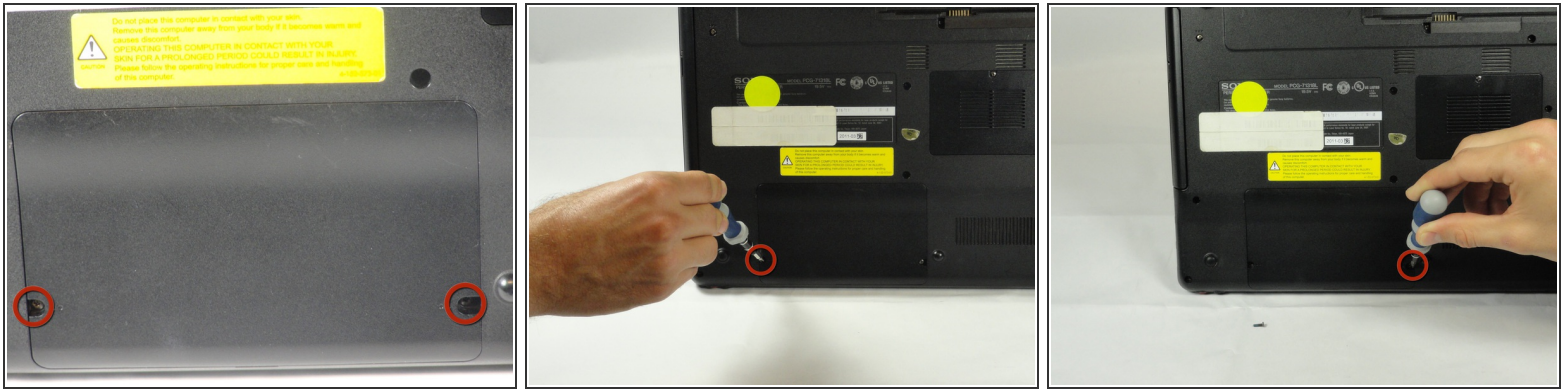
- Remove all charge from the laptop by holding down the power button for at least 5 seconds.

Step 6



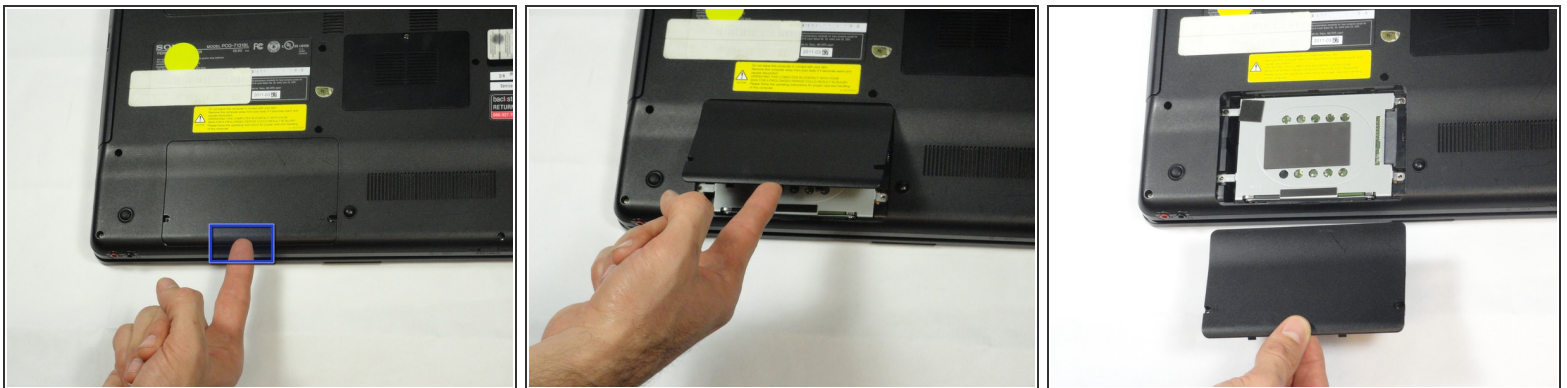
- Turn laptop onto its backside and locate the hard drive cover panel.

Step 7



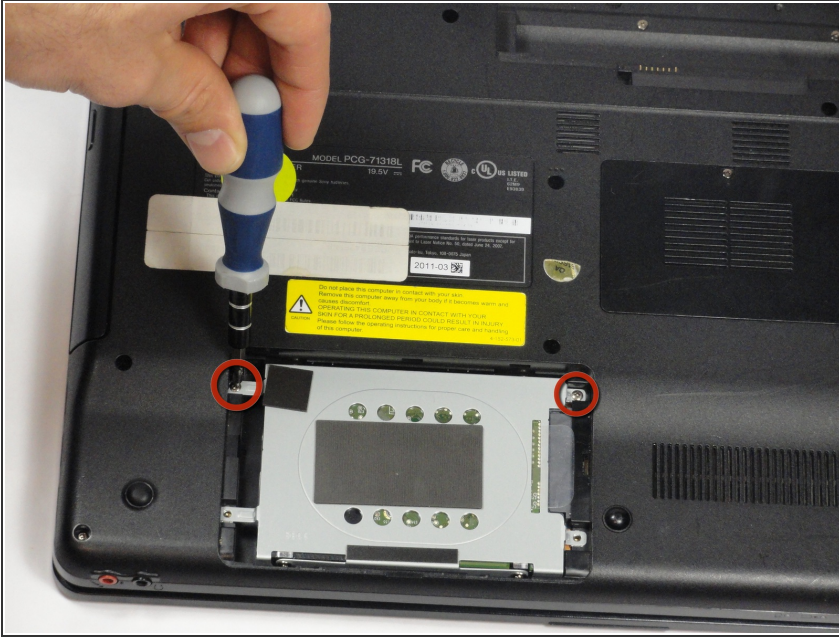
- Use a Phillips #00 screwdriver to remove the two 7.75-mm cover screws on the bottom corners of the panel.

Step 8



- Use a finger/fingernail to grip the notch at the bottom of the panel to lift it off.
- ⓘ You may need to use your other hand to safely remove the panel.
- ⓘ You can also use a spudger for this step

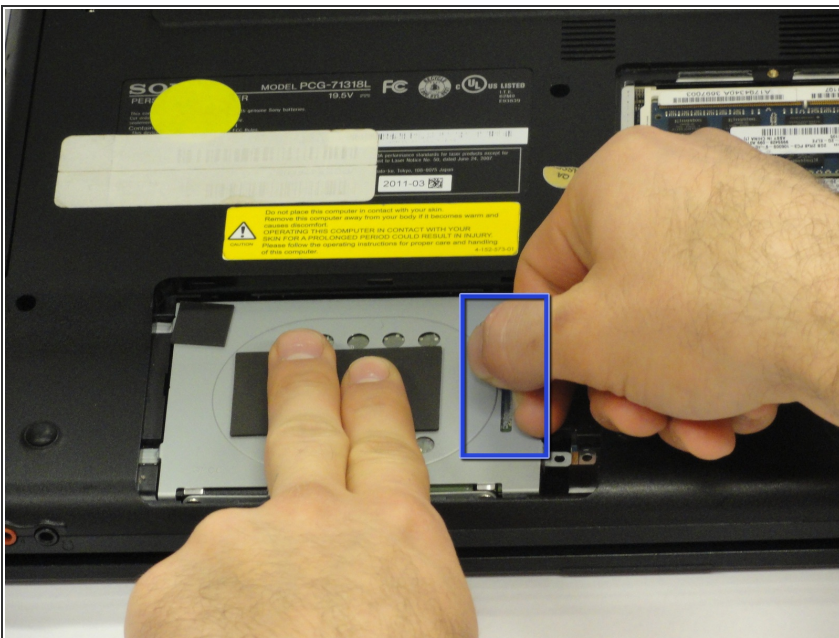
Step 9



i The hard drive should now be exposed.

- Remove the two remaining 7.75-mm screws using the Phillips #00 screwdriver.

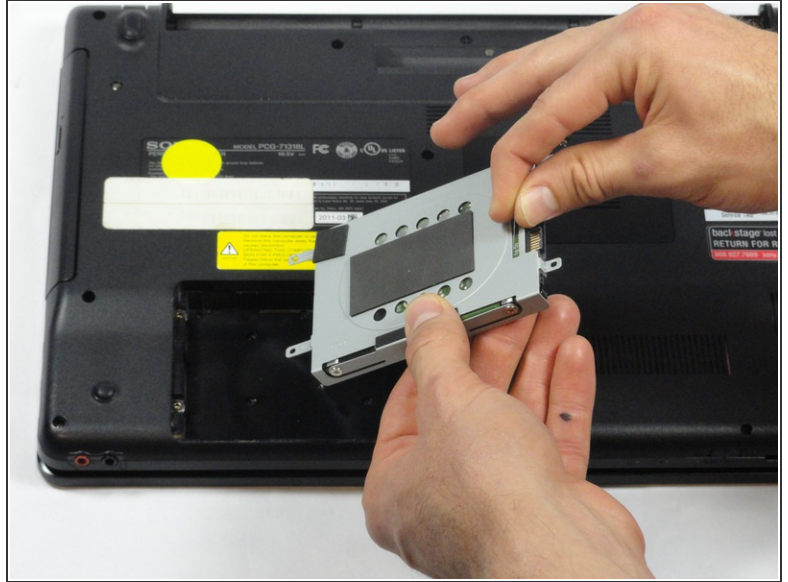
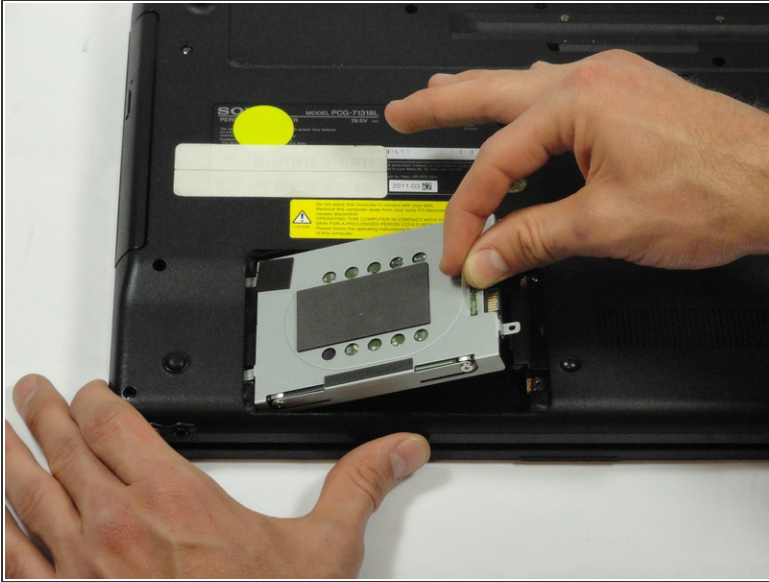
Step 10



- Grab the tab between your thumb and index finger.
- Hold the hard drive securely in a horizontal position using your other hand.
- Push the hard drive to the left using the plastic tab to disconnect it from the laptop.

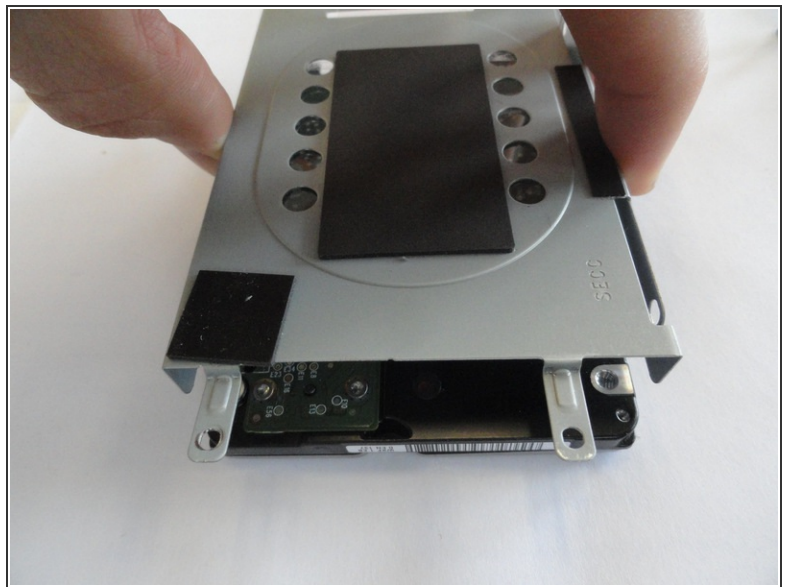
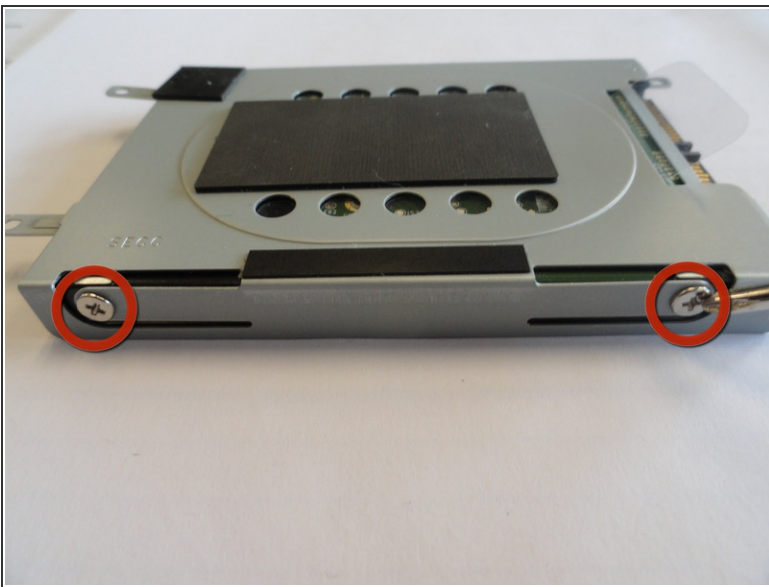
! To prevent damage of the connection on the hard disk drive or the laptop, perform this task slowly and with care.

Step 11



- While still holding the plastic tab, lift the right side of the hard drive out at a 45° angle.
- Pull the hard drive out.

Step 12



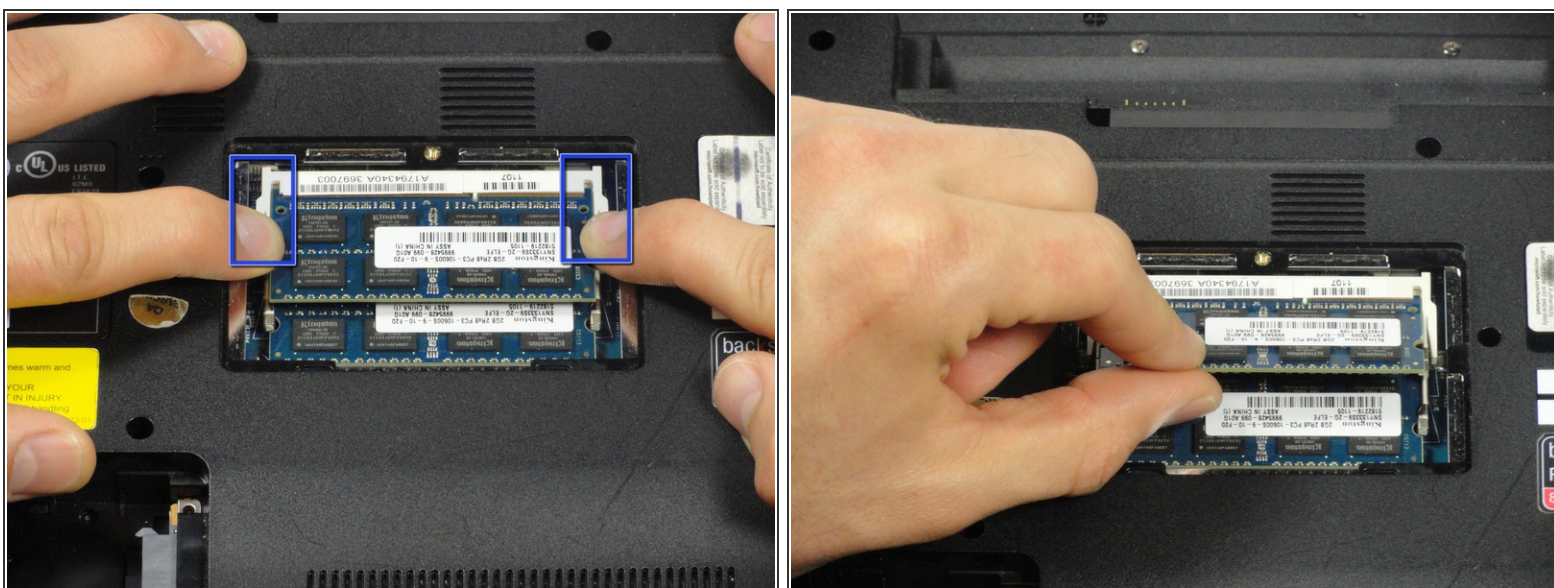
- If you need to remove the bracket from the hard drive, follow the next few steps:
 - Remove the two 3.67-mm screws from either side of the bracket with a Phillips #00 screwdriver.
 - Lift the bracket off the hard drive.

Step 13 — RAM



- Remove the one screw with a Phillips #00 screwdriver.
- ❗ The screw cannot be removed from the RAM casing cover.

Step 14



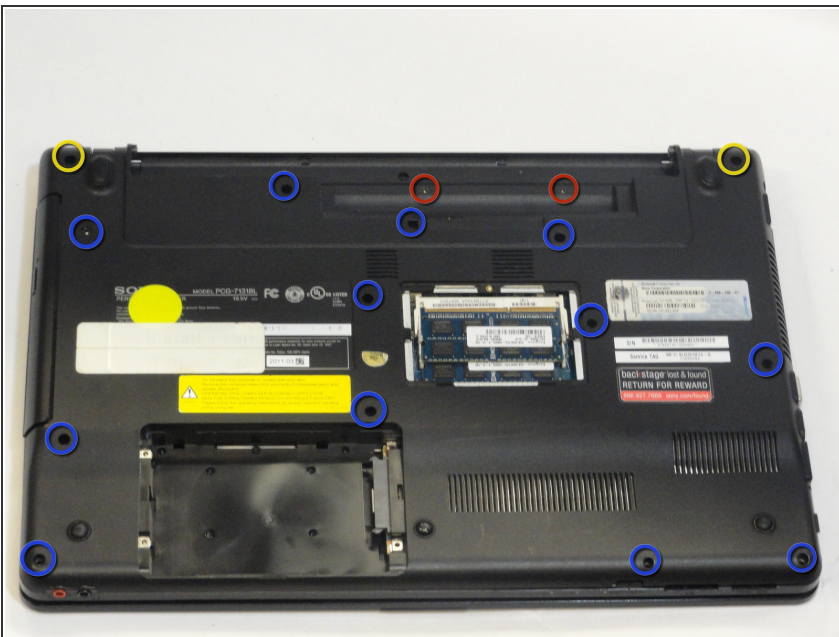
- Pull the two retaining arms away from the center of the RAM chip.
- The RAM will make a "pop" sound and the RAM stick will rise for ease of handling.

Step 15



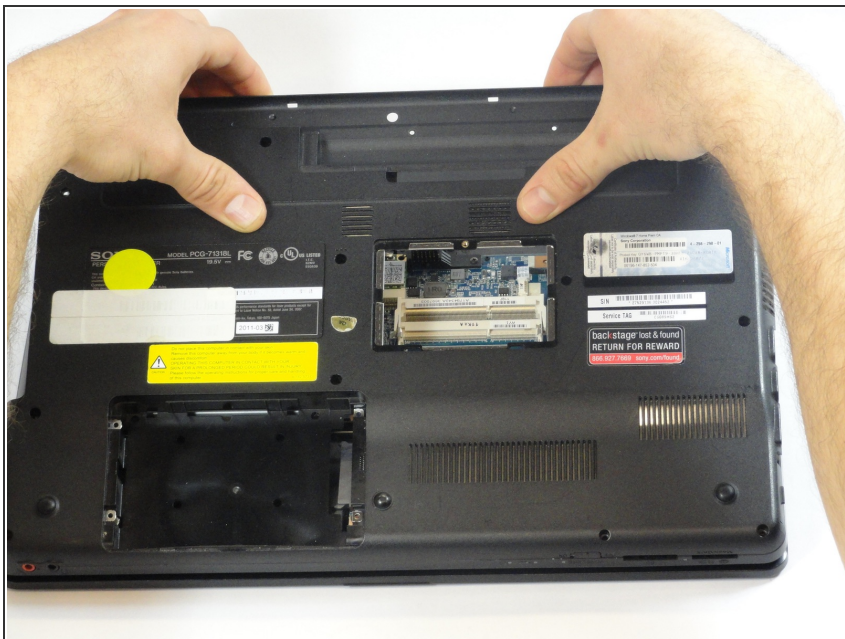
- Pull the RAM stick out of its socket.
- To remove the second stick of RAM, repeat steps six and seven.
- When installing RAM, make sure sticks are firmly in place or the computer will not register them.

Step 16 — Fan



- Remove the following 16 screws securing the back cover using a Phillips #00 screwdriver:
 - Two 3.8-mm screws
 - Two 8.9-mm screws
 - Twelve 7.75-mm screws

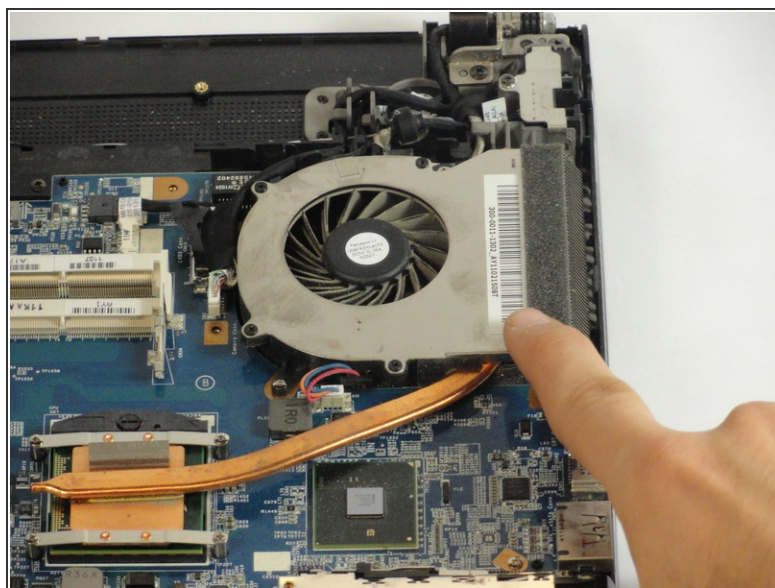
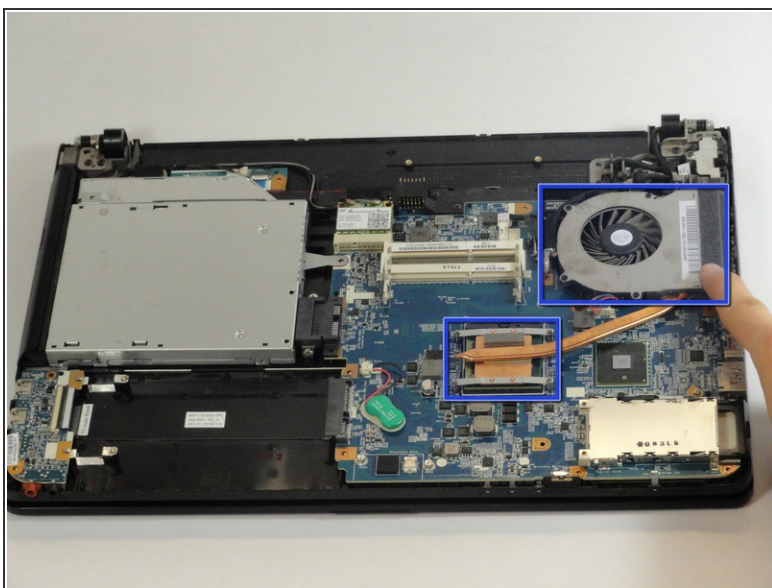
Step 17



⚠ Check to make sure all the screws have been removed.

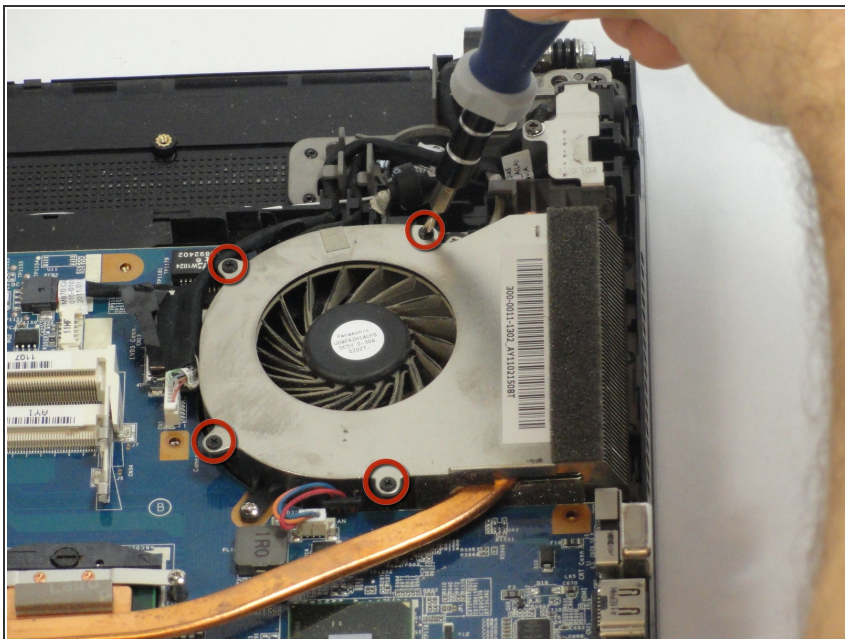
- Using both hands, separate the back cover by lifting from the back and working around the perimeter to release tabs.

Step 18



- Locate the fan and the processor attachment.

Step 19



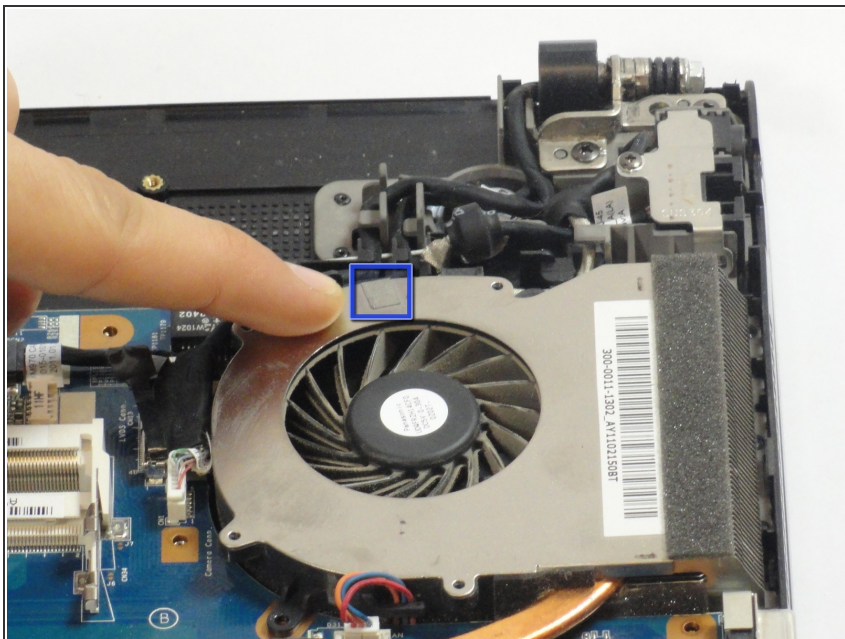
- Using a Phillips #00 screwdriver, remove the top four 3.88-mm fan screws.

Step 20



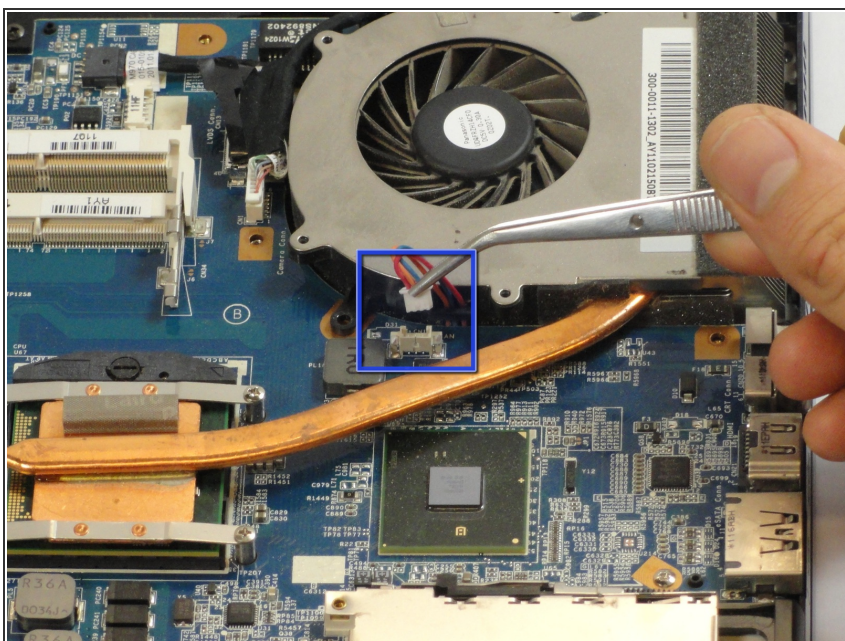
- Remove the two 5.7-mm screws located at the base of the fan, using a Phillips #00 screwdriver.

Step 21



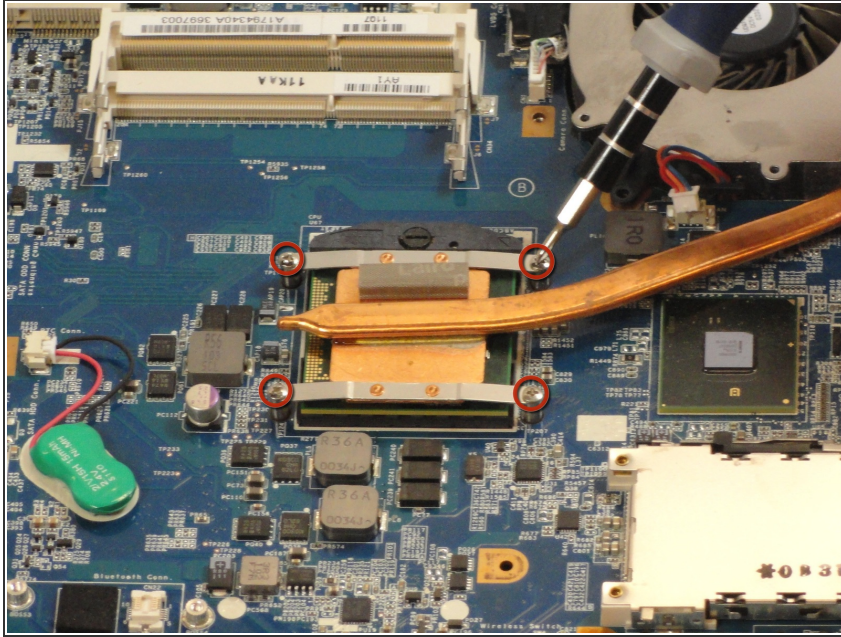
- Pull back the tape located on the far side of the fan.

Step 22



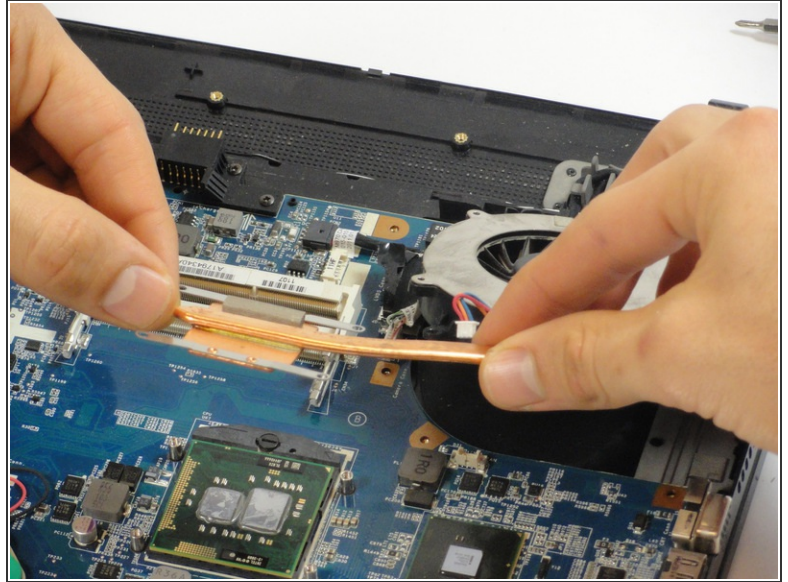
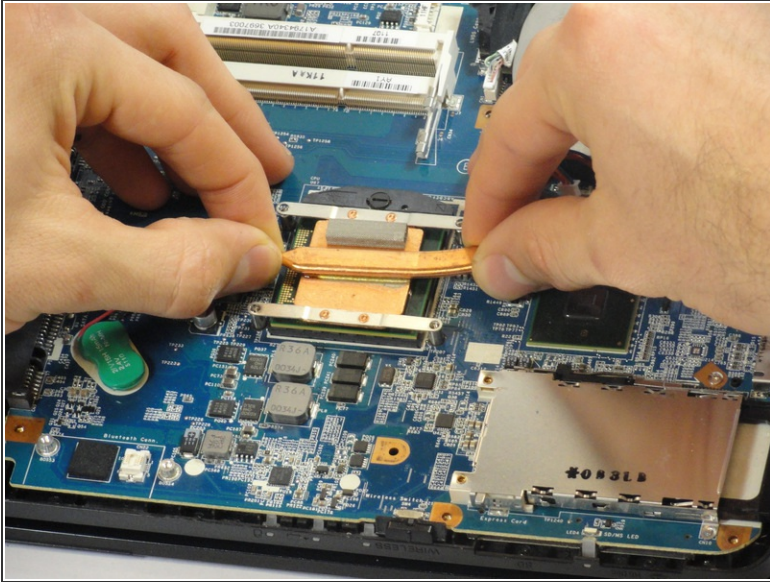
- Remove the wired connection between the fan and the copper wire using metal tweezers.
- ⚠ Do not pull on the wires directly or it will damage the connection between the fan and the laptop.

Step 23



- Remove the four 5.65-mm screws on the processor corners using a Phillips #00 screwdriver.

Step 24



i You are now ready to remove fan and processor connection

- Position thumbs and index fingers close to processor and lift up on the copper wire, while applying slight downward pressure on the motherboard with remaining fingers.

! If there is thermal paste between the processor and the fan attachment, increased force will be required to detach the fan.

To reassemble your device, follow these instructions in reverse order.

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